96-515163/51 A23 E13 (E11) **MITU 95.03.29**
MITSUBISHI CHEM CORP *JP 08269306-A
95.03.29 95JP-072012 *(96.10.15)* C08L 67/02, C08K 3/00, 5/3477, C08L 85/02, C08K 5/523, 7/02

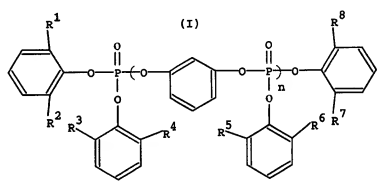
Polyether resin compsn. with high flame resistance, etc. - comprises polyester resin compounded with specific phosphoric ester cpds., melamine cyanurate and reinforcing agents

C96-161462

A(5-E1A2, 8-F, 8-F3) E(5-G8, 7-D13B)

A polyester resin compsn. comprises:
(A) 100 pts.wt. of polyester resin; compounded with
(B) 0.1-10 pts.wt. of a cpd. of formula (I);
(C) 0.1-10 pts.wt. of melamine cyanurate; and
(D) 0-10 pts.wt. of reinforcing agents.

(I)



R^1-R^8 = alkyl having up to 6C; and
n = integer 1-10.
The total amt. of (B) and (C) is up to 15 pts.wt.

ADVANTAGE

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The polyester resin compsn. has high flame resistance, fluidity and hydrolysis resistance and good mechanical properties. It does not emit toxic gases when burnt.

PREFERRED MATERIAL

(A) is polybutylene terephthalate (PBT).

EXAMPLE

PBT (100 pts.), (B) cpd. of formula (I) (3 pts.), and (C) melamine cyanurate (3 pts.) were kneaded and injection moulded to obtain a test piece. The test piece (1) a stretch at breaking pt. of 63% and (2) a rate of change in tensile strength of 88%.

In a comparative example where both (B) and (C) were used in amt. of 15 pts., the test piece had (1) of 12% and (2) of 11%. The rate of change in tensile strength is expressed by the following equation. TS' divided by TS multiplied by 100, where TS = tensile strength of the test piece and TS' tensile strength of the test piece exposed to steam at 120°C for 24 hrs. The larger the rate is, the higher the hydrolysis resistance is.

(CM)

(6pp054DwgNo.0/0)